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10/522,711

02/01/2005

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EXAMINER

O CONNOR, BRIAN T

ART UNIT

PAPER NUMBER

2419

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/522,711 | Applicant(s) BIANCO ET AL. | |
| | Examiner BRIAN T. O'CONNOR | Art Unit 2419 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/21/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to applicant's amendment filed on 10/21/2008.
2. Claims 1-11 are currently pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill (Hill, WIPO Publication WO 01/67803A1, September 13, 2001; cited in IDS dated 08/29/2005).

With respect to claim 1, Hill discloses a method of allocating switch requests within a packet switch(See page 4, lines 12-14, allocating switch requests), the method comprising the steps of

(a) generating switch request data for each input port indicative of the output ports to which data packets are to be transmitted (See page 4, line 15, generating switch request);

(b) processing the switch request data for each input port to generate request data for each input port-output port pairing (See page 4, lines 16-17, processing switch request);

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(c) generating an allocation plan by reducing the number of queue requests relating to each of one or both sets of ports by a common value (page 9, lines 23-29; where the common value is $f/(\sum r_{(i,j)})$ is applied to each transfer request) such that the number of requests relating to each member of the set or sets of ports is no greater than a predetermined frame value (See page 9, lines 18-22).

With respect to claim 2, Hill further discloses wherein the transformation of the request data is done by using the summations of the requests from each input port (See page 9, lines 1-3).

With respect to claim 3, Hill further discloses wherein the transformation of the request data is done by using the summations of the requests to each output port (See page 9, lines 1-3).

With respect to claim 4, Hill further discloses wherein the reduction of the request data from each input port and to each output port is done, in such cases where the number of requests is greater than the maximum capacity of the corresponding input port or corresponding output port, the reduction being by a factor selected such that the number of requests from the corresponding input port and to the corresponding output port is no greater than the maximum capacity of the corresponding input port and the corresponding output port (See page 4. lines 18-29).

With respect to claim 5, Hill further discloses wherein the reduction of the request data from each input port and to each output port is done using a common factor selected such that the number of requests from each input port and to each

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output port is no greater than the maximum request capacity of each input port and each output port (See page 4, lines 21-27).

With respect to claim 6, Hill further discloses wherein the reduction of the request data comprises (a) reducing the number of requests to each output port; and (b) reducing the number of requests in the resulting reduced request data that exceeds the capacity of each input port (See page 4, lines 24-29).

With respect to claim 7, Hill further discloses wherein the transformation of the request data comprises (a) reducing the number of requests from each input port; and (b) reducing the number of requests in the resulting reduced request data that exceeds the capacity of each output port (See page 4, lines 24-29).

With respect to claim 8, Hill further discloses wherein the process is iterative, and is repeated one or more times in respect of input ports and output ports for which capacity remains available after the previous iteration is complete (See page 5, lines 15-19).

With respect to claim 9, Hill further discloses wherein the input port-output port routing is allocated according to the method of claim 1 and the packets are switched on the basis of the allocated routing (See page 4, lines 30-32 and page 5 lines 3-7).

With respect to claim 10, Hill further discloses a packet switch in which the input port-output port routing is allocated in accordance with the method of claim 1 (See page 5, lines 3-8).

With respect to claim 11, Hill further discloses a packet switch according to claim 10, wherein packets are switched from an input port to a specified output port in accordance with the allocated routing (See page 5, lines 3-8).

Response to Arguments

5. Applicant's arguments filed on 10/21/2008 have been fully considered but they are not persuasive.

A. Applicant argues with respect to claim 1, see page 6 (last full paragraph), that "claim 1 considers and reduces the number of requests in each such queue by a common factor".

The Examiner maintains the rejection under 102(b) as anticipated by Hill because Hill discloses a common normalization factor used for every queue request (page 9, lines 23-29).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN T. O'CONNOR whose telephone number is (571)270-1081. The examiner can normally be reached on 9:00AM-6:30PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BTO/
Brian T. O'Connor
January 12, 2009
Patent Examiner

/Hassan Kizou/
Supervisory Patent Examiner, Art Unit 2419